United States Department of the Interior

FISH AND WILDLIFE SERVICE
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In Reply Refer to:
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2015-F-1164-
R002-1

MAY 0 6 2019

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Subject: Second Reinitiation of Formal Consultation for the State Route 99 Ripon Bridge Rehabilitation Project in San Joaquin and Stanislaus Counties, California (California Department of Transportation 10-SJ/STA-99-PM 1.33 (SJ) & 23.33 (STA); EA 10-0L020)

Dear Ms. Gonzalez:

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) request to reinitiate consultation on its action to construct the State Route (SR) 99 Ripon Bridge Rehabilitation Project (project) in San Joaquin and Stanislaus Counties, California. At issue are the proposed project's effects to the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), western distinct population segment of the yellow-billed cuckoo *(Coccyzus americanus;* western yellow-billed cuckoo), and giant garter snake *(Thamnophis gigas)*, and to the federally-endangered riparian brush rabbit (*Sylvilagus bachmani riparius*), riparian woodrat (*Neotoma fuscipes riparia*), and Least Bell's vireo (*Vireo bellii pusillus*). This response is provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), and in accordance with the implementing regulations pertaining to interagency cooperation (50 CFR 402).

Caltrans has assumed the Federal Highway Administration's (FHWA) responsibilities for formal section 7 consultation per the Act, in accordance with 23 U.S.C. 327, and as described in the *Memorandum of Understanding* (MOU) *between the FHWA and Caltrans concerning the State of California's participation in the Surface Transportation Project Delivery Program pursuant to 23 U.S.C. 327* (renewed on December 23, 2016 for a term of five years, and finalized effectively on March 30, 2017). The MOU allows Caltrans to assume the FHWA's environmental responsibilities for highway projects in California under the National Environmental Policy Act and other federal laws.

The federal action on which we are consulting is Caltrans' replacement of a segment of the southbound Stanislaus River Bridge on SR 99 near the City of Ripon. Pursuant to 50 CFR 402.12(j), Caltrans submitted a biological assessment for our review of the findings presented therein, which we received on September 3, 2015. These findings concluded that the proposed project may affect, but is not likely to adversely affect the Least Bell's vireo and western yellow-billed cuckoo; and may affect, and is likely to adversely affect the valley elderberry longhorn beetle, riparian woodrat, riparian brush rabbit, and giant garter snake. Upon further coordination with the Service, Caltrans

communicated in its September 11, 2015, email that it had changed its determination for the giant garter snake to "may affect, but is not likely to adversely affect."

Background regarding Reinitiation:

On January 15, 2016, the Service issued to Caltrans a biological opinion for the project (Service file number 08ESMF00-2015-F-1164), addressing effects to the valley elderberry longhorn beetle, riparian woodrat, and riparian brush rabbit. In the preamble to the biological opinion, the Service concurred with Caltrans' determinations that the project may affect, but is not likely to adversely affect the Least Bell's vireo, western yellow-billed cuckoo, and giant garter snake. On June 4, 2018, the Service issued to Caltrans a reinitiated biological opinion for the project (Service file number 08ESMF00-2015-F-1164-R001), which addressed 1) modifications made to the scope of work resulting in the replacement of a shorter segment of bridge than expected initially (through the addition of cofferdams and a reduction in the number of bridge spans requiring removal); and 2) a change in Caltrans' species determination for the valley elderberry longhorn beetle based on new information gathered about the elderberry shrubs from a visit to the project area (the three shrubs identified originally on-site were no longer present or visible, i.e., they were deceased, overgrown and outcompeted by surrounding vegetation, or had been removed/destroyed). Accordingly, Caltrans decided to revise its determination for the species from "may affect, likely to adversely affect" to "may affect, not likely to adversely affect."

We received your most recent letter, dated February 5, 2019, in our office on February 6, 2019. In this letter, you requested to reinitiate consultation again in order to address the recurrence of several live elderberry shrubs within the project footprint, which were discovered during recent visits to the site in January 2019. In response to our request for additional information, we received your revised letter via email on March 7, 2019. Because you have concluded that these shrubs cannot be avoided during the course of construction and therefore will need to be cut back completely to ground level and discarded, you have modified your determination for the valley elderberry longhorn beetle to the following: the project may affect, and is likely to adversely affect the species. Accordingly, we have updated those sections of the biological opinion pertaining to the conservation measures, the status of the species, the environmental baseline, the effects of the action, the conclusion, the amount or extent of take, and the terms and conditions.

In considering your request, we based our evaluation on the following: (1) Caltrans' revised March 7, 2019 letter requesting reinitiation of consultation for a second time; (2) Caltrans' January 26, 2018, letter requesting reinitiation of consultation, along with its revised *Ripon Bridge Rehab Biological Assessment*; (3) Caltrans' September 2, 2015, letter requesting consultation and its original August 2015 *Ripon Bridge Rehab Biological Assessment*; (4) a site visit attended by the Service and Caltrans on January 8, 2016; (5) email correspondence and telephone discussions between the Service and Caltrans; and (6) other information available to the Service.

Caltrans' proposed changes to the project will not affect the riparian woodrat, riparian brush rabbit, Least Bell's vireo, western yellow-billed cuckoo, or giant garter snake in a manner not previously considered in the 2016 biological opinion or in the 2018 reinitiated biological opinion. Therefore, there will be no change in the effects to these species from the project, and no change in Caltrans' existing determinations for these species (i.e., "may affect, and is likely to adversely affect" for the riparian brush rabbit and riparian woodrat, and "may affect, but is not likely to adversely affect" for the Least Bell's vireo, western yellow-billed cuckoo, and giant garter snake).

The remainder of this document provides our amended biological opinion on the effects of the proposed project on the valley elderberry longhorn beetle, riparian woodrat, and riparian brush

rabbit, as well as a fully updated consultation history. This document supersedes our previously issued June 4, 2018 reinitiated biological opinion. Changes in text from the June 4, 2018 reinitiated biological opinion are shown by a strikethrough line for removed text and a double underline for new text in order to aid in their identification.

Species Discussion:

The California Natural Diversity Database (CNDDB, 2015) shows a 1977 observation of the western yellow-billed cuckoo 7 miles (mi) downstream of the action area. Other observations are recorded at least 50 mi from the action area. The CNDDB (2015) shows a 2009 observation of the Least Bell's vireo approximately 9 mi downstream at the San Joaquin River National Wildlife Refuge. The next nearest observations were recorded over 15 mi from the action area. The CNDDB (2015) shows a 1987 observation of the giant garter snake over 15 mi to the north in the Calaveras River Watershed. Other occurrences are known from over 30 mi to the south in the grasslands area and over 40 mi to the north in the Bay Delta. ~~According to the CNDDB (2018), the closest record for the valley elderberry longhorn beetle exists approximately 5 mi southwest of the action area in Caswell Memorial State Park, and dates from 1985. Other records are located approximately 5.7 mi northeast of the action area along the Stanislaus River (and dates from 2009), and approximately 8.6 mi southwest of Ripon Bridge in the San Joaquin River National Wildlife Refuge (and dates from 1984).~~

The Service concurs that the proposed project may affect, and is not likely to adversely affect the Least Bell's vireo and western yellow-billed cuckoo because only small patches of riparian habitat exist between SR 99 and the railroad tracks and the vegetation will be cleared outside of the migratory bird breeding season. The Service concurs that the proposed project may affect, and is not likely to adversely affect the giant garter snake due to the isolation of the Stanislaus River at Ripon from the known population centers in the Cosumnes-Mokelumne Basin to the north, the Delta Basin to the west, and the San Joaquin Basin to the south. Giant garter snakes typically do not inhabit the main stem of larger rivers like the Stanislaus, and there is no other suitable aquatic habitat such as agricultural ditches, ponds, or other waterways within proximity of the action area. ~~The Service also concurs that the proposed project may affect, but is not likely to adversely affect the valley elderberry longhorn beetle based on information obtained from Caltrans' recent site visit. In January 2018, Caltrans discovered that the three elderberry shrubs identified originally on-site (on the southern riverbank immediately adjacent to SR 99) were no longer present or visible, i.e., they were deceased, overgrown and outcompeted by surrounding vegetation, and/or had been removed/destroyed. Based on this, Caltrans no longer anticipates that there will be impacts to shrubs as a result of construction activities. And without healthy shrubs present to support the valley elderberry longhorn beetle, the likelihood that this species occurs in the project area is low.~~

Out of an abundance of caution, however, Caltrans has incorporated conservation measures specifically addressing each of these ~~four~~ species in the Conservation Measures section~~, beginning on page 5~~, in order to reduce the potential for adverse effects to these species.

~~The remainder of this document provides our biological opinion on the effects of the proposed project on the riparian brush rabbit and riparian woodrat.~~

Consultation History

September 3, 2015: The Service received Caltrans' letter and biological assessment requesting to initiate formal consultation. The Service received complete information regarding the project on this date.

September 10, 2015:	Caltrans and the Service exchanged mails clarifying effects to the giant garter snake. Caltrans changed its determination for the giant garter snake to 'may affect, not likely to adversely affect.'
October 29, 2015:	The Service joined Caltrans' engineers and biologists at the project area to review the proposed action and discuss the conservation strategy.
November 16, 2015:	The Service and Caltrans exchanged emails finalizing the language for the Description of the Action.
January 8, 2016:	The Service conducted a site visit to review habitat under leafless grape.
January 15, 2016:	The Service issued to Caltrans a biological opinion for the project.
January 29, 2018:	The Service received Caltrans' January 26, 2018 letter requesting to reinitiate consultation, along with an updated biological assessment.
February 21, 2018:	The Service emailed Caltrans to request additional information regarding the updated biological assessment.
March 1, 2018:	Caltrans responded to the Service's request for additional information.
April 30 & May 3, 2018:	The Service and Caltrans discussed the conservation measures that were proposed in the original biological assessment (and in the updated biological assessment) for those species for which Caltrans had made "may affect, but is unlikely to adversely affect" determinations.
June 4, 2018:	The Service issued to Caltrans a reinitiated biological opinion.
February 6, 2019:	The Service received a hard copy of Caltrans' letter, dated February 5, 2019, in which it requested to reinitiate formal consultation again in order to re-address its determination for the valley elderberry longhorn beetle due to Caltrans' recent discovery of four elderberry shrubs on-site. Caltrans concluded that it would be necessary to impact these shrubs during construction.
February 18, 2019:	The Service emailed Caltrans to ask for additional information pertaining to its reinitiation request letter.
March 7, 2019:	Caltrans emailed the Service to provide answers to the Service's February 18 questions and comments, as well as a revised reinitiation request letter package (dated the same day). The Service deemed the reinitiation package complete as of this date.
April 4-5 & 9-11, 2019:	The Service emailed Caltrans to follow-up with several additional questions/clarifications about aspects of the project. They exchanged further emails pertaining to the possibility of transplanting the

elderberry shrubs outside the dormant season and compensatory mitigation. They also discussed, via email and over the telephone, the current flooding conditions at the project site.

BIOLOGICAL OPINION

Description of the Action

Caltrans will replace approximately 206 feet (ft.) of the southern portion of the southbound Stanislaus River Bridge (No. 29-0013 L) on SR 99 over the Stanislaus River near the City of Ripon. Existing Spans 3 and 4, along with the two adjoining approach spans will be removed and replaced. New abutments and the center seam of the roadway will be constructed to accommodate the three bat species that currently occupy the seam and abutments to be demolished.

The existing access road begins within the city of Ripon approximately 0.2 mi from the river, is located between the rail tracks and SR 99, and extends to the riparian vegetation along the north bank of the river. The existing access will be used for equipment access and construction staging at both abutments. Access road improvements may include placing imported fill over the existing road. However, the contractor also may elect not to use imported fill for the project.

For work over the river and along the southern bank of the river, it is anticipated that the contractor will set up a temporary trestle in order to facilitate the movement of equipment. Trestle-based activities will involve driving piles in the river, and installing spans consisting of rolled steel shapes with joists and decking placed on top (similar to falsework). The trestle will measure approximately 30 ft. wide by 155 ft. long, with spans measuring approximately 20 ft. long. Approximately 100 12-inch-wide square timber and/or steel piles will be used for the trestle. There are likely to be at least four piles per trestle bent. Installation of the piles will not require any excavation; rather, the piles will be driven into the ground at-grade. Following the completion of construction on the bridge, the trestle will be removed. Any remaining piles will be cut off to 1 ft. below the finished grade. Trestle piles will be confined to Caltrans' right-of-way and any trestle components situated within temporary construction easements will not use deep foundations.

As a less likely alternative to the temporary trestle, the contractor instead may choose to install temporary diversion pipes that maintain the existing flow of water. These pipes will be placed in the river with clean gravel on top. The gravel surface will act as a temporary access road. After construction on the bridge is finished, the gravel and pipes will be removed and the river channel will be restored to its pre-construction condition.

Substructure work will consist of installing new pile cap footings supported on driven steel piles. The work is expected to encounter groundwater. No excavation is anticipated outside of the existing state right-of-way. Piles will be driven at Piers 3, 4, and 5. Placement of the new pile cap footings will require the use of a dewatering system, most likely a cofferdam. A seal course within the cofferdam (an additional thickness of concrete placed below the footing, which prevents water from seeping into the cofferdam from the wet ground below it) may be necessary, depending on the elevation of the river at the time of construction. Dewatering of the active channel will take place for no more than one season. Approximately 981 cubic yards of material per pier will be excavated from the bottom of the footings during pile driving efforts. A portion of existing Piers 3, 4, and 5 will be removed and replaced with the new pile cap footings and new pier walls. The existing timber and/or steel driven piles will remain in place, but if any of these existing piles conflict with the placement of the new set of driven steel piles, they will be removed, as needed.

There will be 24 piles per bent, and with three bents in total, this will result in a total of 72 piles. Approximately 3,312 ft.^{2} of ground around the three bents will be disturbed during construction.

Construction will utilize formwork over falsework. Formwork is used to give 'form' to concrete, such as for the new pile cap footings, columns, and bent caps, whereas falsework is used when there is nothing capable of supporting the formwork. However, because the new concrete deck will be supported on stay-in-place steel forms attached to the existing steel girders, there is no need for falsework.

Bridge demolition and reconstruction will take place in stages with the inside lanes removed and reconstructed during the first season, and the outside lanes removed and reconstructed during the second season. Temporary detour roads will be constructed within the median of the mainline while the bridge section is being replaced. The existing concrete median barrier will be removed and the median section will be repaved or re-striped as needed between the Hammett Road overcrossing and the Main Street overcrossing.

Construction is anticipated to take an estimated 220 working days over the course of approximately two years from start to completion. Work is expected to begin in January 2019 and end in December 2020. In-water bridgework is expected to start in June and to continue through October (though due to the recent flooding of the site, it could begin later).

Conservation Measures

Caltrans and its contractor propose to implement the following conservation measures for the Least Bell's vireo, western yellow-billed cuckoo, giant garter snake, ~~and~~ valley elderberry longhorn beetle, riparian woodrat, and riparian brush rabbit to reduce any potential effects to the species. For the purpose of this consultation, a "qualified biologist," as referenced in this document, refers to an individual who, at a minimum, holds a four-year degree in a relevant biological field and who has demonstrated knowledge of, and experience with, the particular species being discussed.

All Species

1. Prior to the start of work, a qualified biologist(s) will conduct an environmental awareness training program for all construction personnel, including contractors, subcontractors, and contractor's representatives, covering the status of all ~~four~~ species; how to identify these species and their habitats (including the elderberry host plant); what to do if these species are encountered during construction activities; the importance of avoiding impacts to the species (and to the host plant for the valley elderberry longhorn beetle); and the state and federal laws pertaining to them. New construction personnel who are added to the project after the training is first conducted also will be required to take the training. Documentation of the training, including sign-in sheets, will be kept on-file.

2. All food-related trash items such as wrappers, cans, bottles, and food scraps generated by project-related activities and personnel will be disposed of in closed containers and removed daily from the project site in order to reduce the potential for attracting predator species.

Least Bell's vireo and western yellow-billed cuckoo

1. A qualified biologist(s) will conduct nesting surveys during the season prior to the start of construction to determine if any individuals of either species are nesting within, or in proximity to, the project site.

a. If nesting individuals are observed on-site, the nest site will be designated as an environmentally sensitive area (ESA); a buffer will be established around the nest (250 ft. radius for the Least Bell's vireo and 500 ft. radius for the western yellow-billed cuckoo) in order to preclude work within this area until a qualified biologist(s) has determined that the young have fledged.

b. A qualified biologist(s) will monitor any active nests during the course of construction activities.

Giant garter snake

1. In-water work will take place during the active season for the giant garter snake (approximately May 1 to October 1) when the species is more likely to be moving around and can more easily avoid being disturbed.

2. A qualified biologist(s) will conduct preconstruction surveys for the species no more than 24 hours prior to the start of groundbreaking; the biologist(s) also will identify any areas with the potential to encounter a giant garter snake.

3. A qualified biologist(s) will be present on-site to monitor initial ground-disturbing activities.

4. All project-related vehicles and equipment within the project footprint will observe a daytime speed of no more than 20 mi per hour (mph) to reduce the risk of running over the species.

Valley elderberry longhorn beetle

~~1. In the event that any elderberry shrubs reappear within the project footprint, no work will occur within 20 ft. of the dripline of any given shrub. They will be designated as an ESA. ESA provisions will be included in the construction contract special provisions and designated as such on the plans.~~

2. Caltrans proposes to provide compensatory mitigation for the temporary loss of 0.43 acre (ac) of riparian habitat and of the elimination of four elderberry shrubs (*Sambucus* sp.) within this acreage by purchasing a total of 31.5 valley elderberry longhorn beetle credits at a Service-approved conservation bank whose service area covers the project area (Table 1). The conservation credit purchase will be completed prior to the start of bridgework.

Table 1: Valley Elderberry Longhorn Beetle Habitat-Level Compensation (per the Service's 2017 *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (VELB Framework)

Habitat Type	Total Acres of Disturbance	Compensation Ratio[1]	Acres of Credits	Total Credit Purchase[2]
Riparian	0.43	3:1	1.29	31.5

[1] acre(s) of credits: acre(s) of disturbance
[2] One credit (unit) = 1,800 ft^2 =0.041 ac

3. Prior to any ground disturbance and/or the start of work, a qualified biologist(s) will conduct a general preconstruction wildlife survey as well as a survey for elderberry shrubs located within 165 ft. of the project footprint. If the survey documents any shrubs with stem diameters measuring greater than 1 inch that were not identified during the most recent surveys, Caltrans will contact the Service to discuss how to proceed.

~~Caltrans and its contractor will implement the following conservation measures as part of the proposed action to reduce potential effects to the riparian woodrat and riparian brush rabbit.~~

Riparian woodrat and riparian brush rabbit

1. ~~Construction personnel will participate in a Service-approved worker environmental awareness program prior to the onset of construction activities. A qualified biologist(s) will inform all construction personnel about the life history of the riparian woodrat, and riparian brush rabbit; how to identify these species and their habitats; what to do if these species are encountered during construction activities; and explain the state and federal laws pertaining to them.~~

2. The boundary of the proposed project footprint will be delineated with exclusionary fencing (silt fence with bottom buried) to prevent riparian brush rabbits from entering the site during construction. The eastern boundary is the edge of the existing abutment and bents. The fencing will be designed to allow existing access for recreational use while preventing riparian brush rabbits from accessing the construction area during non-work hours.

3. During the installation of the exclusionary fencing and all initial vegetation clearing activities, a qualified biologist with demonstrated experience with safe handling and capture of riparian woodrats or riparian brush rabbits will be present in the work area to recover any riparian brush rabbits or riparian woodrats that may be found within the proposed project footprint. If a riparian brush rabbit or riparian woodrat is found within the work area, each individual will be encouraged by the qualified biologist to move on its own toward the riparian forest to the east by using non-contact hazing (e.g. walk toward, clap, make noise, beat ground with stick). Some form of barrier will be maintained as the hazing moves the individual to cover just east of the action area. If the individual does not move on its own, it will be captured by a qualified biologist and released along the upstream side of the exclusionary fencing. Capture will be by netting or trapping. When all individuals are cleared from an area, exclusionary fencing will be installed.

4. All vegetation will be removed between December 1 and February 1 to avoid the bird-breeding season and to ensure clearing occurs when vegetation is dormant. All vegetation will be removed by hand to ensure that no riparian brush rabbits or riparian woodrats are affected by vegetation removal.

5. Fueling and maintenance of vehicles and other equipment and staging areas will occur in an already disturbed portion of the action area at least 100 ft. from water and will be contained to ensure that contamination of habitat does not occur during such operations.

6. Prior to the onset of work, Caltrans will prepare and comply with an emergency response plan to allow a prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

7. No rodenticides and herbicides will be used in the action area.

8. Riparian woodrats are attracted to den-like structures such as logs, stumps, and small human structures and may enter stored pipes, culverts, or small structures and become trapped or injured. If a woodrat is discovered, a qualified biologist will follow measure #3 above.

a. All construction pipes, culverts, or structures that could provide temporary shelter for woodrats that are stored at a construction site for one or more overnight periods will be thoroughly inspected for woodrats before the pipe is subsequently buried, capped, or otherwise used or moved in any way.

b. All logs, stumps, or other natural features on the south side of the river will be inspected for use by woodrats.

9. Following project completion, any and all construction debris and stockpiled materials at the project site will be removed and temporarily affected areas will be revegetated via hydro-seeding with an appropriate, weed-free native plant seed mixture.

10. Lighting will be directed to shine directly towards work areas and away from adjacent riparian areas.

11. No plastic, monofilament, jute, or similar erosion control matting that could entangle individuals will be used. Possible substitutions include coconut coir matting, tackified hydro-seeding compounds, or other materials approved by the Service.

12. To prevent the inadvertent entrapment of these species, or other wildlife during construction, all excavated, steep-walled holes or trenches measuring more than 6 inches deep either will be covered at the close of each working day using plywood or similar materials (without openings), or will be provided with one or more escape ramps constructed of earth fill or wooden planks in the event that the holes/trenches cannot be fully covered. All holes or trenches will be checked daily for trapped wildlife. Before such holes or trenches are filled, they will be inspected thoroughly for trapped wildlife.

Action Area

The action area is defined in 50 CFR § 402.02, as "all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action." For the proposed project, the action area encompasses the project footprint, which includes the area impacted by construction-related activities, equipment, and personnel (i.e., operations, access, storage, and staging). This extends westwards out to the rail corridor and covers the temporary access road and temporary construction easement; eastwards to the eastern edge of the southbound bridge; and northwards and southwards to the abutments terminating the bridge structure. The action area also includes land extending approximately 200 ft. from the edge of the footprint that will experience further-reaching effects of construction activities such as noise and visual disturbance.

Analytical Framework for the Jeopardy Determination

Section 7(a)(2) of the Act requires that federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. "Jeopardize the continued existence of" means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR 402.02).

The jeopardy analysis in this biological opinion considers the effects of the proposed federal action, and any cumulative effects, on the range-wide survival and recovery of the listed species. It relies on four components: (1) the *Status* of *the Species,* which describes the range-wide condition of the species, the factors responsible for that condition, and their survival and recovery needs; (2) the

Environmental Baseline, which analyzes the condition of the species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (3) the *Effects* of *the Action*, which determines the direct and indirect impacts of the proposed federal action and the effects of any interrelated or interdependent activities on the species; and (4) the *Cumulative Effects*, which evaluates the effects of future, non-federal activities in the action area on the species.

~~In accordance with policy and regulation, the jeopardy analysis in this biological opinion relies on four components: (1) the *Status of the Species*, which evaluates the riparian woodrat, and riparian brush rabbit range-wide condition, the factors responsible for that condition, and their survival and recovery needs; (2) the *Environmental Baseline*, which evaluates the condition of the riparian woodrat, and riparian brush rabbit in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the riparian woodrat, and riparian brush rabbit; (3) the *Effects of the Action*, which determines the direct and indirect impacts of the proposed federal action and the effects of any interrelated or interdependent activities on the riparian woodrat, and riparian brush rabbit; and (4) *Cumulative Effects*, which evaluates the effects of future, non-federal activities in the action area on the riparian woodrat, and riparian brush rabbit.~~

~~In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed federal action in the context of the riparian woodrat, and riparian brush rabbit current statuses, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of these species in the wild.~~

~~The jeopardy analysis in this biological opinion places an emphasis on consideration of the range-wide survival and recovery needs of the riparian woodrat, and riparian brush rabbit and the role of the action area in the survival and recovery of the riparian woodrat, and riparian brush rabbit as the context for evaluating the significance of the effects of the proposed federal action, taken together with cumulative effects, for purposes of making the jeopardy determination.~~

Status of the Species

Valley elderberry longhorn beetle

For the most recent comprehensive assessment of the range-wide status for the valley elderberry longhorn beetle, please refer to the Service's September 17, 2014 withdrawal of the October 2, 2012, proposed rule to delist the valley elderberry longhorn beetle: *Endangered and Threatened Wildlife and Plants; Withdrawal of the Proposed Rule to Remove the Valley Elderberry Longhorn Beetle from the Federal List of Endangered and Threatened Wildlife* (79 FR 55874-55917) (withdrawal). Threats discussed in the withdrawal have continued to act on the species, with loss and degradation of riparian habitat being the most significant effect, stemming in particular from levee and flood protection infrastructure, road and trail use/maintenance, invasive plants, and pesticides. While there continue to be losses of valley elderberry longhorn beetle habitat throughout its range, to date no project has proposed a level of effects for which the Service has issued a biological opinion of jeopardy for the species.

Riparian woodrat

For the most recent comprehensive assessment of the species' range-wide status, please refer to the *Riparian Woodrat 5-year Review: Summary and Evaluation* (Service, 2012). No change in the species' listing status was recommended in this 5-year review. Threats evaluated during that review and discussed in the final document have continued to act on the species since the 5-year review was

finalized, with loss of habitat being the most significant effect. There has been no real change in habitat at the two known population centers, and habitat is being restored on lands adjacent to the San Joaquin River National Wildlife Refuge. The exact distribution of individual riparian woodrats over its current range is difficult to know with certainty because it does not rely on stick lodges, is known to use downed trees, snags, or even buildings for shelter, and this nocturnal animal lives in the riparian habitat along large rivers that have not been surveyed for this species.

No research has been conducted on the spatial distribution and habitat use of the riparian woodrat. The riparian woodrat is a subspecies of the dusky-footed woodrat and likely has similar spatial distribution in established male territories. Dusky-footed woodrats live in loosely cooperative societies and have a matrilineal (mother-offspring associations; through the maternal line) social structure. Young males typically disperse from breeding area to establish a new area. Innes *et al.* (2009) studied the spatial organization of dusky-footed woodrats (*Neotoma fuscipes*) in the mixed conifer forest of the northern Sierra Nevada, California and found that male territories ranged from 0.42 ac to 18 ac and female core areas within this territory ranged from 0.14 ac to 7.38 ac.

Riparian brush rabbit

The riparian brush rabbit is one of eight brush rabbit subspecies found in California (Service, 1998; Service, 2000). The riparian brush rabbit is a small, brownish rabbit, distinguished from other brush rabbit subspecies by its relatively pale color, gray sides, darker back, and the fact that, viewed from above, its cheeks protrude outward rather than being straight or concave (Orr, 1940). Riparian brush rabbits inhabit riparian areas marked by dense, bushy thickets of California wild rose (*Rosa californica)*, blackberries (*Rubus* spp.*)*, or willows (*Salix* spp.*)*. Riparian brush rabbits are dependent on this brushy cover for protection and travel via tunnels under dense vegetation to avoid predators. Thus, availability of early successional riparian habitat is crucial for the survival of this species (Hamilton *et al.*, 2010). Riparian brush rabbits are most active during the twilight hours around dawn and dusk. Depending on the season, main activity periods last 2-4 hours. The least activity is from about 10:30 a.m. to 4:00 p.m. (Chapman, 1974).

In California, months with higher precipitation correspond with the peak breeding season for riparian brush rabbits (Hamilton, 2010), but there have been few direct studies of riparian brush rabbit reproduction. Breeding occurred from February to May or June for wild riparian brush rabbits in two studies (Basey, 1990; Williams, 1988) and from December to May for other brush rabbits in coastal California (Mossman, 1955). However, in recent captive propagation, reproduction of riparian brush rabbits was found to start earlier (in December versus February) and extend much later (to October versus May) than had been seen in the wild for this or other subspecies (Williams *et al.*, 2008).

At the time of listing, we described one extant population of riparian brush rabbits on protected property within the 104 hectare (258 ac) Caswell Memorial State Park (Caswell MSP), located on the northern bank of the Stanislaus River in San Joaquin County, California. In 1998, a second extant population of riparian brush rabbits was confirmed in small, degraded remnants of riparian habitat in the south part of California's Sacramento-San Joaquin River Delta (South Delta) (Williams *et al.*, 2000; Williams and Hamilton, 2002). Riparian brush rabbits were subsequently discovered in approximately nine other small South Delta riparian remnants, all in the same area of the South Delta near Stewart Tract and the town of Lathrop (Williams and Hamilton, 2002; Lloyd and Williams, 2003; Hamilton, 2010). Due to the imminent threats faced by the Caswell MSP population and the South Delta population, a reintroduction project was initiated (Williams *et al.*, 2002). From November 2001 to December 2013, the Endangered Species Recovery Program (ESRP) at the California State University, Stanislaus raised riparian brush rabbits in a controlled propagation

facility. The ESRP reintroduced these riparian brush rabbits in suitable habitat located within their historical range, including habitat on the San Joaquin River National Wildlife Refuge (the Refuge). Currently, there are three known populations of riparian brush rabbits: Caswell MSP, the South Delta, and the Refuge. Since the time of listing, reoccurring floods, fires, and other natural events have adversely affected both native populations and the translocated riparian brush rabbit population. All three riparian brush rabbit populations remain at risk of imminent extinction from these stochastic threats. The exact distribution of riparian brush rabbit along the Stanislaus River is unknown due to the lack of surveys for the species in areas upstream of Caswell MSP.

Environmental Baseline

The action area occurs in riparian habitat on the floodplain of the Stanislaus River at the downstream end of a large riparian forest. This large riparian forest is sufficient to provide habitat to a range of listed and sensitive flora and fauna. Habitat downstream of the action area is variable, consisting of small patches of riparian floodplain interspersed with narrow bands of riparian vegetation along steep historic river embankments. To the north, lies the City of Ripon and lands to the south are in agriculture. The habitat along the river and within the action area is diverse. The north side of the river has continuous vegetative cover under the bridge providing cover for small mammals moving along the river corridor. Under the causeway and along the north side of the river, graminoids provide continuous cover until California wild grape vines (*Vitis californica*) growing in from the eastern riparian habitat shade them out. The wild grape vines extend several feet under the bridge and are leafless during the winter when vegetation will be cleared. The area between the roadway and railway is dominated by willow and ground cover. The south side of the river between the roadway and railway currently has wild grape growing over the elderberry shrubs and other ground features that were unidentifiable during the January 2016 site visit. There is no vegetation under the bridge along the south side of the river.

Caltrans crews carried out de-vegetation efforts on-site between January 28-31, 2019. According to Caltrans, a homeless/transient population was encamped under the bridge on the south side of the river in proximity to the work area while routine disturbance stemming from human recreational activities like jogging and biking occurred on the north side of the river. Currently, the project footprint is devoid of vegetation, with the exception of four elderberry shrubs. The water level in the river channel began to rise in mid-March 2019, so at present, these shrubs are either fully or partially submerged underwater.

Valley elderberry longhorn beetle

Because surveys for the species tend to be conducted more often in areas along roadsides and in public parks or natural lands, the full extent and distribution of the valley elderberry longhorn beetle along waterways like the Stanislaus River is unknown. Although there is an historical record at Caswell MSP (approximately 5 air mi downstream of the action area), the habitat between Caswell MSP and the Ripon Bridge action area has not been surveyed specifically for the valley elderberry longhorn beetle and so the distribution of the species along this particular segment of the Stanislaus River also remains unknown.

In January 2018, Caltrans' biologists discovered that the three elderberry shrubs identified originally on the south bank of the river within the project footprint either were dead, were severely overgrown/outcompeted by the surrounding vegetation, or had been removed. However, a year later in January 2019, they observed a total of four elderberry shrubs within the project footprint. Of these four, three had regrown on the southern bank, immediately adjacent to southbound SR 99, while the fourth was discovered on the northern bank, also bordering southbound SR 99. The

fourth shrub was detected following the start of clearing by the vegetation removal crews. Because this shrub had become prodigiously overgrown by the surrounding vegetation, it had not been visible to the biologists during their survey efforts in previous years; they identified it only after the removal crews had cleared around it. The biologists detected numerous exit holes in all four shrubs; they also found several species of beetle present on the shrubs, but did not specifically identify any valley elderberry longhorn beetles. Given that there is suitable riparian habitat along the Stanislaus River both within and near the proposed action area (though habitat within the footprint is currently denuded in preparation for construction and has since flooded), and that exit holes are present, which indicate the potential presence of valley elderberry longhorn beetle larvae, there is a reasonable likelihood that the species occurs at the bridge site.

According to the California Natural Diversity Database (CNDDB, 2019), while no records of the valley elderberry longhorn beetle exist within the action area itself, there are six records located within 10 mi of the action area, the closest being that in Caswell MSP, which dates from 1985. Three of the records are situated upstream of the action area, also along the Stanislaus River (the most recent of which dates from 2009), while another record dates from 1984 in the Joaquin River National Wildlife Refuge, located southwest of Ripon Bridge.

Riparian woodrat

The riparian woodrat is known to inhabit the riparian habitat at Caswell MSP and the Refuge. Caswell MSP is less than 5 mi downstream along the Stanislaus River. Suitable patchy habitat grows along the floodplain of the Stanislaus River between the State Park and the action area making it possible for riparian woodrats to move along the riverbanks. Surveys for the riparian woodrat along the Stanislaus River upstream of Caswell MSP have not been conducted; therefore, the distribution of riparian woodrats along the Stanislaus River is unknown. Because riparian woodrats use other natural and manmade features in addition to stick huts, this nocturnal species is difficult to detect along the Stanislaus River. The riparian habitat situated immediately upstream of the action area is high quality riparian habitat and was never surveyed for riparian woodrats. Dispersing juveniles and adult males pushed out of occupied territories by alpha males are likely to move along the Stanislaus River riparian corridor. The south side of the river has approximately 0.1 ac of vegetative cover dominated by wild grape and several shrubs between the highway and railroad. There is debris and thick vegetation under the grape on the south side of the river that could provide shelter to dispersing riparian woodrats. It is reasonably likely that riparian woodrats travel within the riparian habitat along the Stanislaus River and could be found in the habitat in and around the action area.

Riparian brush rabbit

The riparian brush rabbit is known to inhabit riparian habitat along the San Joaquin and Stanislaus Rivers in the Refuge, Caswell MSP, and as far north along the San Joaquin River as the Oxbow Preserve, due west of Lathrop. Through a captive breeding program, individuals from Caswell MSP were released into the Refuge. Surveys for the riparian brush rabbit along the Stanislaus River, upstream of Caswell MSP have not been conducted; therefore, the distribution of riparian brush rabbit along the Stanislaus River is unknown. Patrick Kelly from the ESRP stated (2014), "I don't think that Caltrans can exclude the possibility that riparian brush rabbits are present at Ripon Bridge." The riparian habitat located immediately upstream of the action area is high quality riparian habitat and was never surveyed for riparian brush rabbits. Approximately 0.02 ac of forage habitat and cover occurs under the eastern edge of the roadway within the project footprint. It is reasonably likely that dispersing riparian brush rabbits travel within the riparian habitat along the Stanislaus River and could be found in the habitat in and around the action area.

Effects of the Action

Valley elderberry longhorn beetle

The clearing/removal of vegetation associated with preparation of the construction site has resulted in the temporary loss of 0.43 ac of riparian habitat and also will result in the elimination of four elderberry shrubs within that acreage. An additional 0.21 ac of ruderal habitat also has been temporarily disturbed as a result of vegetation removal, and is likely to experience ongoing disturbance during construction due to vehicle/equipment access and staging. Due to concerns over access and safety (three shrubs are situated above a utility pipeline), timing constraints leading up to the start of construction, and limited transplanting success during the growing season, Caltrans plans to discard all four shrubs on-site during the course of construction (i.e., once it cuts them back to ground level) rather than transplant them off-site.

According to Caltrans, the water level within the Stanislaus River channel has increased steadily since mid-March 2019 due to the heavy winter rains, and the project site has since flooded. At present, all four shrubs sit either partially or fully submerged underwater. Given the possibility that flooding conditions will persist for several more months, the elderberry shrubs are considerably less likely to survive inundation for such an extended length of time. While there is no research on the effects of flooding to valley elderberry longhorn beetle larvae, it is likely that prolonged inundation will negatively affect their survival as well. Once the waters recede and Caltrans begins construction on the bridge, both shrubs and larvae are likely to be dead already, or at least severely impaired.

However, if any of the stems remain above the water, it is possible that larvae could continue to persist in, and that adult beetles could emerge from, these stems. Additionally, in the event that any of the four shrubs actually survive the flooding once the waters subside, adult beetles from the surrounding area could mate and lay their eggs on the leaves prior to Caltrans cutting back the shrubs. Once the shrubs are cut back to ground level though, any eggs that are present will be destroyed and any larvae that have burrowed into the stems will lose their food source and die prematurely; furthermore, adult beetles will lose their access to suitable breeding and foraging habitat. The removal of elderberry shrubs typically would occur when the adult beetles are inactive, i.e., outside of the flight season, which is when they emerge, mate, and lay their eggs (flight season is approximately March - July). However, because Caltrans discovered the shrubs later in the season and does not have time to wait to remove them during the next August-February interval, Caltrans will have to dispose of the shrubs when the adult beetles are active. Consequently, not only will there be an increase in the risk of disturbance to, and even death of, the adults during their flight season, but also any eggs they lay on the leaves will die, as will the larvae that have already hatched and bored into the stems.

The temporary loss of riparian vegetation within the action area, along with the loss of the elderberry shrubs themselves, will increase habitat fragmentation along this otherwise contiguous span of the Stanislaus River and may reduce the ability of adults in the immediate area to successfully find suitable habitat for breeding and foraging. Ongoing habitat fragmentation and extirpation of isolated populations is a recognized threat to the recovery of the species (Service, 2017). Although such a relatively small amount of habitat loss is unlikely to result in the actual isolation of the population of valley elderberry longhorn beetles present within the project footprint, any such population is already likely to be very small, so any remaining individuals still will have to travel further to find food and mates, which may prolong their exposure to predators as well as lead to a localized reduction in fitness. Even so, adverse effects stemming from the temporary loss of this patch of riparian habitat and the disposal of shrubs are unlikely to reduce the long-term survival and reproduction of the wider spread of valley elderberry longhorn beetles along the Stanislaus River, particularly since this habitat will not be lost permanently to concrete, new structures, or other

construction elements of a similar nature; instead, with time, the site is expected to revert naturally to riparian habitat and to be available to the species once again.

As noted previously in the **Description of the Action** section, Caltrans also has proposed a set of conservation measures, including the commitment to provide compensatory habitat as a condition of the action. The compensatory habitat is intended to minimize the effect on the valley elderberry longhorn beetle resulting from the temporary loss of 0.43 ac of riparian habitat, within which four elderberry shrubs also are situated, as described above. The proposed compensatory habitat will be in the form of credits from a conservation bank. This component of the action will have the effect of protecting and managing lands for the species' conservation in perpetuity. The compensatory lands will provide suitable habitat for breeding, feeding, or sheltering commensurate with, or better than, habitat lost as a result of the proposed project. Providing this compensatory habitat as part of a relatively large, contiguous block of conserved land may contribute to other recovery efforts for the species.

Riparian woodrat and riparian brush rabbit

If riparian woodrats or riparian brush rabbits are present during the removal of ~~0.088~~ 0.43 ac of riparian vegetation and clearance surveys within the perimeter of the proposed project footprint, ~~the proposed action will require~~ a qualified biologist will be present to encourage riparian woodrats or riparian brush rabbits to leave under their own effort. All individuals encountered during clearance surveys will be encouraged to move toward, or relocated to, the contiguous riparian habitat east of the action area. If an individual does not leave the action area on its own, then a qualified biologist will capture and release the riparian woodrat or riparian brush rabbit (but only if absolutely necessary). Although activities like non-contact hazing, and capture and release will ~~result in disturbance to~~ disturb and stress the species, such activities are not reasonably likely to injure or kill individuals. ~~but we do not anticipate injury or death to any riparian woodrats or riparian brush rabbits.~~

Due to the small size of the area to be cleared on each side of the river and the isolation of the habitat on the south side of the river, temporary impacts to vegetative cover within the proposed project footprint will have insignificant effects on riparian habitat for the riparian woodrat and riparian brush rabbit. During construction, the extensive habitat surrounding the action area will provide suitable habitat for both species. Following construction, riparian vegetation will regrow along the Stanislaus River, which will provide both species with habitat similar to what was present pre-construction.

Cumulative Effects

Cumulative effects include the effects of future state, tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. During this consultation, the Service did not identify any future non-federal actions that are reasonably certain to occur in the action area of the proposed project.

Conclusion

After reviewing the current status of the valley elderberry longhorn beetle, riparian woodrat, and riparian brush rabbit, the environmental baseline for the action area, the effects of the proposed SR 99 Ripon Bridge Rehabilitation Project, and the cumulative effects, it is the Service's biological

opinion that the SR 99 Ripon Bridge Rehabilitation Project, as proposed, is not likely to jeopardize the continued existence of the valley elderberry longhorn beetle, riparian woodrat, and riparian brush rabbit. The Service reached this conclusion because the project-related effects to the species, when added to the environmental baseline and analyzed in consideration of all potential cumulative effects, will not rise to the level of precluding recovery or reducing the likelihood of survival of the species. This is based on the following: (1) construction activities will be relatively minor in scale and scope; (2) the amount of riparian habitat that will be temporarily lost and the number of elderberry shrubs that will be discarded represent a very small proportion of habitat available to the species along the wider extent of the Stanislaus River, as well as throughout the full range of the species; (3) the riparian habitat on-site will not be permanently eliminated as a result of project construction, so the vegetation is likely to re-grow over time, resulting in riparian habitat available for future use by all three species; (4) habitat will be removed outside of the breeding season for the riparian woodrat and riparian brush rabbit; and (5) ~~upstream, no riparian woodrats or riparian brush rabbits will be injured or killed~~ the conservation measures proposed by Caltrans, including compensatory mitigation, will avoid and minimize the adverse effects to the valley elderberry longhorn beetle, riparian woodrat, and riparian brush rabbit and will ensure that habitat for the valley elderberry longhorn beetle will be protected and managed in perpetuity.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by Service regulations at 50 CFR 17.3 as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the same regulations as an act that actually kills or injures wildlife. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by Caltrans so that they become binding conditions of any contract developed with the contractor for the exemption in section 7(o)(2) to apply. Caltrans has a continuing duty to regulate the activity covered by this incidental take statement. If Caltrans (1) fails to assume and implement the terms and conditions or (2) fails to require its contractor to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the contract, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, Caltrans must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR 402.14(i)(3)].

Amount or Extent of Take

Valley elderberry longhorn beetle

It is infeasible for the Service to quantify the number of valley elderberry longhorn beetles that will be taken as a result of the proposed action because the number of individuals in the action area is

unknown, and estimates of population density in the action area are unavailable. Furthermore, the Service anticipates that the species will be extremely difficult to detect because adult beetles live for only a few weeks and are rarely encountered; exit holes provide evidence only of historic larval occupation; and their cryptic lifecycle presents a challenge when determining if an area is currently occupied by the species because larvae can live in an elderberry shrub for up to two years and yet present no outward evidence that the shrub is occupied.

In instances in which the number of individuals that may be taken cannot be determined, the Service may quantify take in the amount of lost or disturbed habitat as a result of the project action; since take is expected to result from these effects to habitat, the quantification of habitat becomes a surrogate for the species that will be taken. Accordingly, there is a risk of harm to, and mortality of all adult valley elderberry longhorn beetles within the action area, as well as a risk of harm to, and mortality of eggs on leaves and larvae inhabiting the stems (measuring greater than or equal to 1 inch in diameter at ground level) of four elderberry shrubs within the project footprint resulting from: 1) the temporary loss of 0.43 ac of riparian habitat; and 2) cutting back the elderberry shrubs to ground-level and discarding them.

The Service therefore is exempting the following take incidental to the proposed action from the prohibitions described under section 9 of the Act.

1. The harm to, and mortality of all adult valley elderberry longhorn beetles within 0.43 ac of riparian habitat within the action area.

2. The harm to, and mortality of all valley elderberry longhorn beetle eggs and larvae occupying the four elderberry shrubs within the project footprint.

If more than four elderberry shrubs are discarded and/or more than 0.43 ac of riparian habitat is affected, then take has been exceeded and Caltrans must reinitiate formal consultation.

Upon implementation of the following reasonable and prudent measures, terms and conditions, and the proposed conservation measures described herein, incidental take of the valley elderberry longhorn beetle associated with constructing the proposed project will become exempt from the prohibitions described in section 9 of the Act. No other forms of take are exempted under this opinion.

Riparian woodrat

Although the Service cannot quantify the number of riparian woodrats that will be incidentally taken within the action area, the Service anticipates that this number will be low based on the fact that the action area is small and so the species is not expected to be present in high numbers or densities. The Service anticipates that there will be incidental take of no more than one riparian woodrat in the form of harm when a biologist encourages an individual to leave the action area, or in the form of capture when the individual does not leave the action area on its own and is captured and released into suitable habitat adjacent to and upstream of the action area.

Riparian brush rabbit

Although the Service cannot quantify the number of riparian brush rabbits that will be incidentally taken within the action area, the Service anticipates that this number will be low based on the fact that the action area is small and so the species is not expected to be present in high numbers or densities. The Service anticipates that there will be incidental take of no more than one riparian

brush rabbit in the form of harm when a biologist encourages an individual to leave the action area, or in the form of capture when the individual does not leave the action area on its own and is captured and released into suitable habitat adjacent to and upstream of the action area.

Upon implementation of the following reasonable and prudent measure, terms and conditions, and proposed conservation measures, incidental take of the riparian woodrat and riparian brush rabbit associated with the SR 99 Ripon Bridge Rehabilitation Project will become exempt from the prohibitions described in section 9 of the Act. No other forms of take are exempted under this opinion.

Effect of the Take

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species.

Reasonable and Prudent Measure

All necessary and appropriate measures to avoid or minimize effects on the valley elderberry longhorn beetle, riparian woodrat, and riparian brush rabbit resulting from implementation of this project have been incorporated into the project's proposed conservation measures. Therefore, the Service believes the following reasonable and prudent measure is necessary and appropriate to minimize incidental take of the valley elderberry longhorn beetle, riparian woodrat, and riparian brush rabbit:

1. All conservation measures, as described in the **Description of the Action** section of this biological opinion, shall be fully implemented and adhered to. Further, this reasonable and prudent measure shall be supplemented by the terms and conditions below.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, Caltrans must ensure compliance with the following terms and conditions, which implement the reasonable and prudent measure described above. These terms and conditions are nondiscretionary.

1. Caltrans shall include full implementation and adherence to the conservation measures as a condition of any permit or contract issued for the project.

2. Caltrans shall require that all personnel associated with this project are made aware of the conservation measures and the responsibility to implement them fully.

3. Caltrans shall provide the Service with a copy of the completed bill of sale and payment receipt upon the purchase of conservation credits for the valley elderberry longhorn beetle.

Monitoring:

In order to monitor whether the amount or extent of incidental take anticipated from implementation of the project is approached or exceeded, Caltrans shall adhere to the following reporting requirements. Should this anticipated amount or extent of incidental take be exceeded, Caltrans must immediately reinitiate formal consultation as per 50 CFR 402.16.

a. For those components of the action that will result in habitat loss and degradation whereby incidental take in the forms of harm and mortality is anticipated, Caltrans shall provide to the Service, following the completion of vegetation clearing and all other ground disturbance, a precise accounting of the total acreage of habitat lost and the number of elderberry shrubs impacted.

b. For those components of the action that may result in direct encounters between listed species and project workers and their equipment whereby incidental take in the form of harm is anticipated, Caltrans shall immediately contact the Service's Sacramento Fish and Wildlife Office (SFWO) at (916) 414-6544 to report the encounter. If the encounter occurs after normal working hours, Caltrans shall contact the SFWO at the earliest possible opportunity the next working day. If injured or killed individuals of the listed species are found, Caltrans shall follow the steps outlined in the **Salvage and Disposition of Individuals** section below.

c. For those components of the action that will require the capture and relocation of any listed species, Caltrans shall immediately contact the Service's SFWO at (916) 414-6544 to report the action. If capture and relocation efforts need to occur after normal working hours, Caltrans shall contact the SFWO at the earliest possible opportunity the next working day.

d. A final post-construction report detailing compliance with the project design criteria and proposed conservation measures described under the **Description of the Action** section of this biological opinion shall be provided to the Service within 90 calendar days of completion of the project. The report shall include: (1) dates of project groundbreaking and completion; (2) pertinent information concerning the success of the project in meeting the conservation measures; (3) an explanation of failure to meet such measures, if any; (4) known project effects on the species, if any; (5) observed incidents of harm to, or mortality of the species, if any; and (6) any other pertinent information.

Salvage and Disposition of Individuals

Injured listed species must be cared for by a licensed veterinarian or other qualified person(s), such as the qualified biologist(s) associated with the project. Dead individuals must be sealed in a re-sealable plastic bag containing a paper with the date and time when the animal was found, the location where it was found, and the name of the person who found it; the bag containing the specimen must be frozen in a freezer located in a secure site, until instructions are received from the Service regarding the disposition of the dead specimen. The Service contact person is the San Joaquin Valley Division Chief of the Endangered Species Program at the SFWO at (916) 414-6544.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. The Service recommends the following actions:

1. Caltrans should implement focused surveys for the valley elderberry longhorn beetle, riparian woodrat, ~~and~~ riparian brush rabbit, Least Bell's vireo, and western yellow-billed cuckoo in riparian habitat within the Central Valley.

2. ~~Caltrans should implement focused surveys for the Least Bell's vireo, and western yellow-billed cuckoo in riparian habitat within the Central Valley.~~

3. Caltrans should report new sightings of any listed species, including the valley elderberry longhorn beetle or its exit holes, to the CNDDB. A copy of the reporting form and a topographic map clearly marked with the location in which the animals were observed also should be provided to the Service.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

REINITIATION—CLOSING STATEMENT

This concludes the reinitiation of formal consultation on the SR 99 Ripon Bridge Rehabilitation Project. ~~The conclusion of the jeopardy analysis for the January 15, 2016, biological opinion is unchanged: the project is not likely to jeopardize the continued existence of the riparian woodrat or the riparian brush rabbit.~~ As provided in 50 CFR §402.16, reinitiation of formal consultation is required and shall be requested by the federal agency or by the Service where discretionary federal agency involvement or control over the action has been retained or is authorized by law and if:

a) the amount or extent of taking specified in the incidental take statement is exceeded;
b) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered;
c) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or
d) a new species is listed or critical habitat designated that may be affected by the identified action.

If you have any questions regarding this biological opinion, please contact Jen Schofield (jen_schofield@fws.gov), or Patricia Cole (patricia_cole@fws.gov), by email, at (916) 414-6544, or at the letterhead address.

Sincerely,

Jennifer M. Norris, Ph.D.
Field Supervisor

cc:
Juan Torres, California Department of Fish and Wildlife, Rancho Cordova, California

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